



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 5 : A61B 6/00	A1	(11) International Publication Number: WO 94/13205 (43) International Publication Date: 23 June 1994 (23.06.94)
<p>(21) International Application Number: PCT/US93/11872</p> <p>(22) International Filing Date: 7 December 1993 (07.12.93)</p> <p>(30) Priority Data: 07/989,045 10 December 1992 (10.12.92) US</p> <p>(60) Parent Application or Grant (63) Related by Continuation US 07/989,045 (CON) Filed on 10 December 1992 (10.12.92)</p> <p>(71) Applicant (for all designated States except US): ACCURAY, INC. [US/US]; 2000 Wyatt Drive, Suite 3, Santa Clara, CA 95054 (US).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): DEPP, Joseph, G. [US/US]; 4815 Blue Ridge Drive, San Jose, CA 95129 (US).</p> <p>(74) Agent: CHAVEZ, Paula, N.; Ware & Freidenrich, 400 Hamilton Avenue, Palo Alto, CA 94301-1825 (US).</p>		<p>(81) Designated States: AU, BR, CA, JP, KR, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published With international search report.</p>

(54) Title: APPARATUS AND METHOD FOR STEROTAXIC RADIOSURGERY AND RADIOTHERAPY

(57) Abstract

There is disclosed herein a technique for carrying out stereotaxic radiosurgery or radiotherapy on a particular target region within a patient by means of a radiosurgical/radiotherapeutic beam of radiation which is at least intermittently directed along a beam path through the target region. One particular beam generating arrangement (20) illustrated is carried by a robotic arm (46) which is movable in at least three dimensions. In accordance with one embodiment disclosed herein, means (12, 12' and un-numbered mechanical means) are provided for moving the robotic arm (46) and beam generating arrangement (20) along a predetermined, non-circular and non-linear path traverse to the beam path while at the same time, the beam path is directed into the target region. In this way, the radiosurgical/radiotherapeutic beam can be directed through the target region from particular treatment points along the transverse path so as to define a non-spherical target region.

